

## **BREEDING 2017**

Wednesday, 29<sup>th</sup> March, 11am

**John Armitage, Towra, Cloughjordan, Co. Tipperary**

***Topics for discussion include:***

Sire Advice

Body condition score

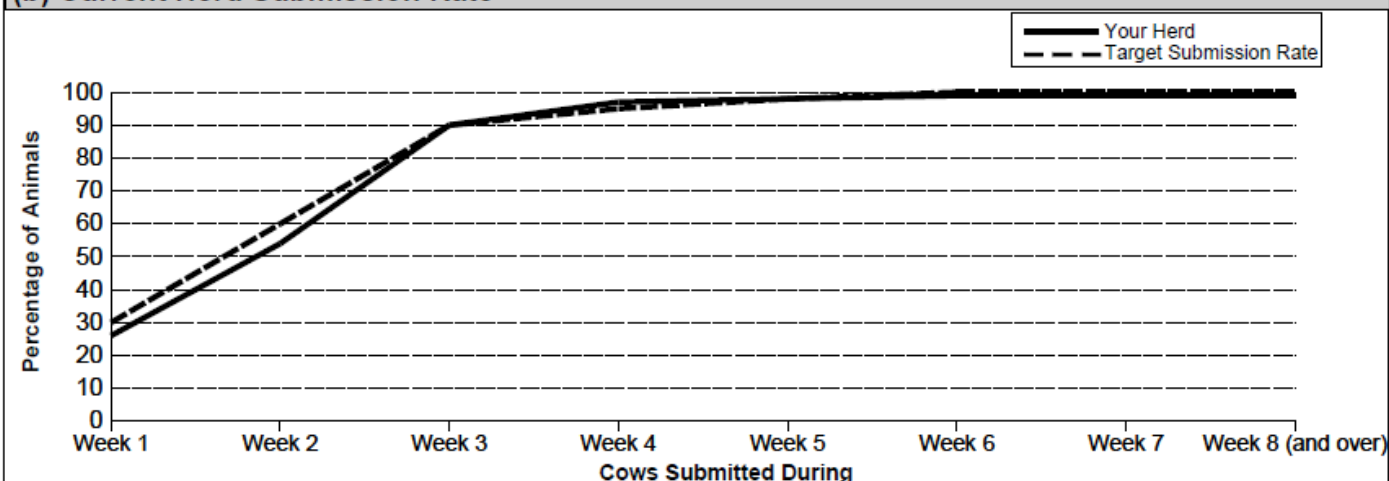
Pre Breeding heat detection

Breeding calendar



	John Armitage	Arrabawn average	Top 10%
Calving interval	366 days	388 days	363 days
6 wk calving rate	88%	63%	83%
AI bred replacements	100%	59%	80%
Herd EBI	€85	€64	€91
kgMS/cow	450kg	352kg	450kg
% Fat	4.11%	4.12%	4.34%
% Protein	3.5%	3.42%	3.58%
Bulls used			
Calving season			

### (b) Current Herd Submission Rate



### (c) Key Performance Indicators (KPI's)

Days since Mating Start Date (MSD):	230 Cows	228 Heifers	Your Herd	Nat. Avg.	Btm. 5%	Your Herd	Top 5%
<b>1. 21 day Submission rate</b>							
Cows/heifers submitted for mating within 21 days of MSD (108 cows/ 27 heifers) as a percentage calved up to 21 days after MSD (120 cows)/(27 dairy heifers > 9mths )			<b>Cows</b>	90%	66%	19%	89%
			<b>Heifers</b>	100%	73%	23%	99%
<b>2. 42 day Submission rate</b>							
Cows/heifers submitted for mating within 42 days of MSD (119 cows/ 27 heifers) as a percentage calved up to 42 days after MSD (120 cows)/(27 dairy heifers > 9mths )			<b>Cows</b>	99%	83%	45%	98%
			<b>Heifers</b>	100%	82%	34%	99%
<b>3. 1st Service Conception Rate</b>							
Cows/heifers confirmed in-calf to 1st service (71 cows/ 14 heifers) as a proportion of cows/heifers submitted (119 cows/ 27 heifers)			<b>Cows</b>	60%	61%	38%	90%
			<b>Heifers</b>	52%	78%	42%	99%

## “Choose your herd’s parents wisely”

What cows do we want?	What bulls must we pick?
365 day calving interval	EBI: Fr €290+; Jer €130+
5 + Lactations	Fertility = €140+
450kg	Milk = €100
5% Fat	% F = 0.18;
4% Protein	% P = 0.15
Low Maintenance	Maintenance = €20+
Good Health status	Health = €0 to + €3

## TIPS

- Herd Plus sire advice, match bulls to cows
- Use a team of 5 Genomic Bulls
- **Proven** easy calving bulls for **heifers** - <2% C. diff
- Late-calving cows - use short gestation bulls.
- Seriously consider cross breeding

**Low Herd Genetics?**  
Contract Mate Agreement  
for Replacements  
& Beef AI your cows

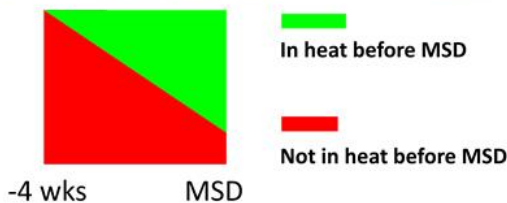


# Pre-breeding heat detection



- Check paint 1x per week
- Record list of cows with paint removed
- Change paint colour

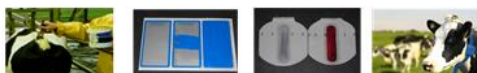
Pre Breeding heat week	Expected week for 1 <sup>st</sup> AI
- 3	1
- 2	2
- 1	3

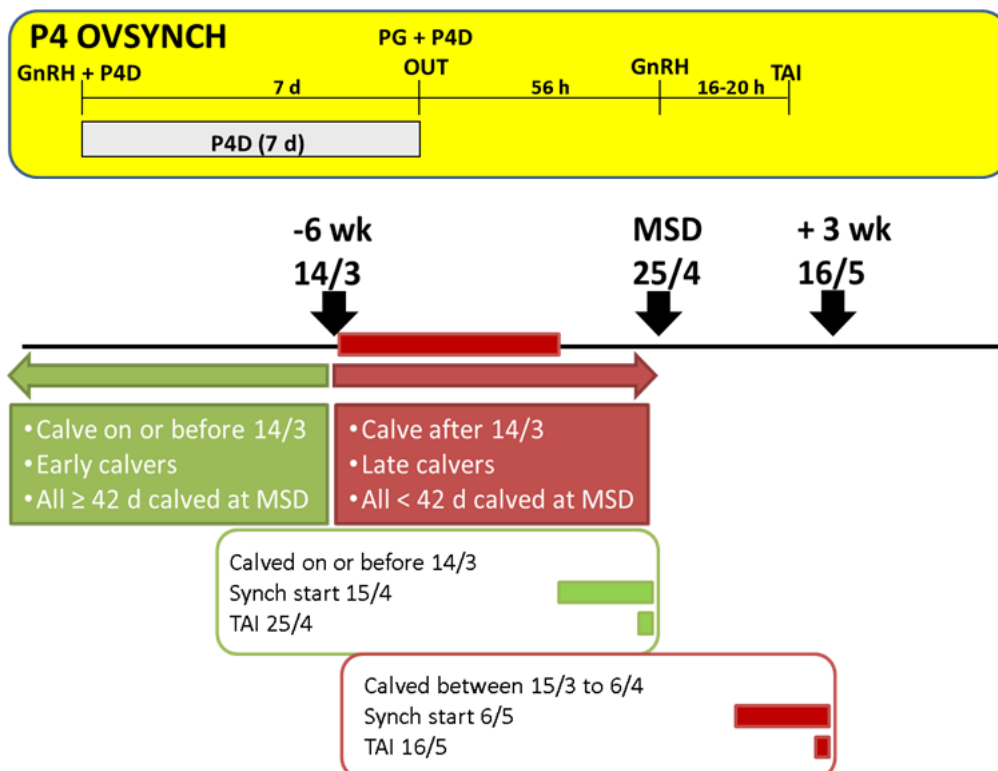


## Non- cycling

<30 days  
More time

≥30 days  
Synchronise with  
P4-Ovsynch





## 12 week breeding season

Median Calving Date - 20<sup>th</sup> February

Day	Week	Date	Task
-20		11 <sup>th</sup> April	Tail paint all cows <b>red</b> and record heats
0		30 <sup>th</sup> April	Tail paint all cows that have shown heat <b>green</b>
1		1 <sup>st</sup> May	Mating start date– identify cows in heat and bull Tail paint cows bulled <b>blue</b>
2		2 <sup>nd</sup> May	Vet examines non-cycling cows – <b>red</b> cows
21	3	21 <sup>st</sup> May	Calculate three week submission rate bred ( <b>blue</b> cows)/ total * 100 <b>90%</b>
42	6	12 <sup>th</sup> June	Introduce bull
84	12	24 <sup>th</sup> July	Mating end date - Remove bull

**100% submission rate**  
**70% conception rate**

Day	Date	Task
1-6	23 <sup>rd</sup> April	Mating Start Date - Tail paint heifers <b>red</b> and bull heifers that show heat Tail paint heifers <b>blue</b> after being served
7	29 <sup>th</sup> April	Prostaglandin injection to all heifers not bulled (red heifers). Bull as they show heat and paint <b>blue</b>
17	10 <sup>th</sup> May	2 <sup>nd</sup> shot of PG to heifers not yet bulled ( <b>red</b> heifers)
17-20	10 <sup>th</sup> - 13 <sup>th</sup> May	Bull to a standing heat
20-21	13 <sup>th</sup> - 14 <sup>th</sup> May	AI heifers not bulled at 72 and 96h

## Next Generation herd – Results 2016

	Elite (n=90)	National Average (n=45)
EBI	€249 (top 1%)	€133
Milk Sub Index	€69	€49
Predicted calving interval	-7.8 days	-4.0 days
Predicted survival	3.7%	1.2%
Milk receipts @ 30c/L	€2059	€2005
21 day submission rate	96%	92%
Pregnancy to 1 <sup>st</sup> service	60%	32%
Pregnancy at 6 weeks	77%	55%
Pregnancy at 12 weeks	98%	82%
Services/cow	1.58	1.94

## Impact of heifer weight at breeding on milk production

Heifer weight at breeding	<290kg	291-316kg	317-342kg	>343kg
kgMS in first lactation	383	394	404	417
kgMS in first lactation	448	462	467	478
kgMS in first lactation	474	487	496	503
Total kgMS	1305	1343	1367	1398

## Economic Breeding Index (EBI) Herd Summary - Feb 2017

LoCall 1850 600 900

Herd Owner: JOHN W ARMITAGE

Herd Number: 9170245

Data Extracted: 03/03/2017

## HERD GENEALOGY

"You must choose your parents carefully"

### 1. EBI Herd Summary

Average EBI for all dairy cows with: (i) a known sire (or milk recorded progeny with a known sire) and (ii) are currently on your farm.

\* Number of animals that are missing an EBI result

Animal Group	Num of Cows	Milk Kg	Fat %	Prot %	Surv% CI Days	Milk % Cont	Fertility % Cont	Calv % Cont	Beef % Cont	Maint % Cont	Mgmt % Cont	Health % Cont	EBI €
<b>0.5 kg MS</b>													
Cows with EBI	131	-117	0.10	0.05	1.4	2.4%	55.7%	28.9%	-6.8%	4.3%	-0.4%	1.6%	€ 94
Missing EBI*	0	0.8	0.10	0.05	1.4	2.4%	55.7%	28.9%	-6.8%	4.3%	-0.4%	1.6%	
Total Cows	131	-1.3	0.05	0.05	-3.6								
1st Lactation	33	-51	0.17	0.07	1.6	17%	44.3%	25.6%	-6.7%	4.6%	0.8%	1%	€ 121
2nd Lactation	18	-164	0.13	0.07	1.3	2.8%	52.8%	29.5%	-7.9%	4.5%	0.3%	2.4%	€ 98
3rd Lactation	34	-134	0.08	0.05	1.3	-1.8%	56%	30%	-6%	2.6%	-2.3%	1.3%	€ 88
4th Lactation	20	-148	0.07	0.05	1.1	-4.3%	55.1%	29.9%	-6.1%	1.6%	-0.3%	2.5%	€ 78
5th Lactation (+)	25	-124	0.05	0.02	1.5	-11.3%	55.5%	20.6%	-5.4%	6.1%	-0.1%	1%	€ 76
<b>11.6 kg MS</b>													
Dairy Youngstock													
17 Calves	26	-27	0.15	0.1	2.5	20.5%	47.1%	19.4%	-6.1%	5.2%	0.7%	0.8%	€ 169
Missing EBI*	0	7.1	0.15	0.1	2.5	20.5%	47.1%	19.4%	-6.1%	5.2%	0.7%	0.8%	
Total Calves	26	4.5	0.1	0.1	-4.9								
16 Calves	49	-26	0.14	0.09	2.3	19.5%	47.8%	19%	-7.1%	5.3%	0.5%	0.8%	€ 153
Missing EBI*	0	6.5	0.14	0.09	2.3	19.5%	47.8%	19%	-7.1%	5.3%	0.5%	0.8%	
Total Calves	49	3.9	0.09	0.09	-4.6								

→ 10.4 kg MS

Table 1 Changes to the base cow population

	Milk Kg	Fat Kg	Prot kg	Fat %	Prot %
2005 base	5743	224	195	3.9	3.39
1995 base	5192	196	171	3.79	3.3

# ICBF Sire Advice

Name JOHN W ARMITAGE  
Designator ~~1598+3002~~  
Print Date 10-APR-2016

The following is the output of Sire Advice program for your herd.

	EBI(€)	EBI Sub Index							PTA's							CI days	SU %
		Milk (€)	Fert (€)	Calv (€)	Beef (€)	Maint (€)	Mngt (€)	Hlth (€)	M Kg	F Kg	P Kg	F+P Kg	F %	P %			
All Cows in Herd	154	27	102	28	-7	0	0	0	3	4.4	3.5	7.9	0.09	0.07		-8.2	2.2
Predicted 2017 Calves	235	66	138	32	-11	7	1	0	91	11.1	9.5	20.6	0.15	0.13		-8.0	3.2
Bulls Weighted Averages	316	105	173	36	-14	13	2	1	180	17.8	15.5	33.3	0.20	0.18		-9.9	4.2

2017 CALVES: BIG GENETIC IMPROVEMENT ON HERD AVERAGE.

Note: Predicted EBI & PTA's of 2017 born calves assume cows are mated with Bulls from Bull 1 column

## Bulls selected for use in your herd

Bull	Name of Bull	EBI (€)	No of Sires	EBI Sub Index							PTA's							CI days	Su %	Pr (€)	Supplier
				Milk (€)	Fert (€)	Calv (€)	Beef (€)	Mnt (€)	Mgt (€)	Hlth (€)	M Kg	F Kg	P Kg	F+P Kg	F %	P %					
PWE	BALLYGOWN FRANKIE	298	13	105	162	28	-26	22	3	5	384	15.8	18.5	34.3	0.02	0.11		-9.6	3.5	18	Dovea AI
TFZ	FORTFERGUS ARTIC ORCA	326	12	135	153	34	-19	21	3	2	266	28.3	19.5	47.8	0.33	0.20		-8.1	4.3	18	Dovea AI
YAD	(IG) DIAMOND ANDY	322	7	125	161	31	-12	15	8	-7	356	20.6	20.4	41.0	0.12	0.16		-9.2	3.9	19	NCBC,Munster,PG
KZY	COOKSTOWN BUDDY	301	12	56	208	44	-19	18	-1	-4	-89	12.0	5.4	17.4	0.29	0.17		-13.3	3.5	18	Dovea AI
ZDL	(IG) DUNLARA MANDELLA	310	8	82	178	35	-3	6	7	6	77	15.4	11.0	26.4	0.23	0.16		-9.9	4.6	18	NCBC,Munster,PG
FZC	CASTLEBLAIGH RUTHLESS	289	12	96	145	42	-20	18	3	5	168	16.3	14.2	30.5	0.18	0.17		-7.8	4.1	18	Dovea AI
LWR	(IG) LONGVIEW RELIABLE	352	9	130	178	45	-15	9	5	-1	195	16.6	19.7	36.3	0.17	0.25		-9.3	5.2	22	NCBC,Munster,PG
AGH	AGHAWADDA ARTHUR	303	12	123	150	28	-10	9	5	-3	284	20.0	19.3	39.3	0.17	0.18		-9.4	2.7	18	Dovea AI
BVC	(IG) BOHERCASS COMET	321	8	90	177	55	-21	19	4	-3	82	13.8	12.5	26.3	0.20	0.19		-9.8	4.6	18	NCBC,Munster,PG
FYM	BALLYMULLALA FIONN	323	12	121	173	40	-9	2	-1	-4	258	17.6	19.0	36.6	0.14	0.20		-9.7	4.4	18	Dovea AI
SEW	SEAROAD AWE PAMELA I	332	12	107	171	54	-17	15	-2	4	239	22.1	15.9	38.0	0.24	0.15		-10.1	3.8	21	Dovea AI
JRE	GURTATREA JR EVEREST	291	12	106	159	25	-12	16	-1	-2	234	17.8	16.4	34.1	0.16	0.16		-8.8	4.1	18	Dovea AI
GZY	GADOAGH CUDDY REEKS	338	12	109	214	16	-10	6	1	3	84	18.0	14.7	32.7	0.29	0.25		-12.1	5.3	21	Dovea AI
YKZ	BALLYMADDOCK LHZ TIMOTHY	328	12	89	196	39	-6	6	-2	6	-26	14.1	10.8	24.9	0.29	0.23		-11.1	4.9	18	Dovea AI

ALL BULLS GOOD EXCEPT

### Use ICBF sire advice to select AI bulls:

- Use ICBF sire advice to choose your AI bulls from the active bull list. Follow the following stages:
  - Click on Sire Advice,
  - Go to “select bulls using traits”
  - Tick the following trait boxes: EBI, Fertility, Kg Fat, Kg Protein, % Fat, % Protein,
    - Choose the “top 25%” for each trait.
  - Press “next”. Then assign bulls to cows and heifers (with a “Calving Difficulty” of less than 1)
    - Don’t assign bulls that are greater than minus €3
  - Of these bulls don’t assign any bull that has greater than minus €2 for “Health” traits.
  - Press “assign to cows” and SAVE when done.
- Cross breeding has merit. Consider it very seriously if:-
  - You have an infertile herd.
  - You have wet land and you want a small efficient cow.
  - You have herd health problems (use Norwegian red).
  - Jerseys and Norwegian reds are the main bulls for this purpose.
  - A Jersey bull of €140 EBI will give the same profit in the heifers as a €300 EBI B&W
- Use a stock bull if you wish to lose €80-€100 per year for every cow in your herd.
  - You also run the risk of injury.